12/12/03

Date

Signature

1+1
-----

Approved for use through 10/31/2002. OMB 0651-0032 Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

## UTILITY PATENT APPLICATION TRANSMITTAL

Attorney Docket No.  First Inventor		TI-36502				
		Xiaohui Li				
Title	New Architectu	re for Per Tone Equaliz r with R duced				

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Complexity for DMT-based xDSL Modems

Express Mail Label No. ER 052971244 US Mail Stop Patent Application APPLICATION ELEMENTS ADDRESS TO: Ē **Commissioner for Patents** See MPEP chapter 600 concerning utility patent application contents P.O. Box 1450 Alexandria, VA, 22313-1450 Fee Transmittal Form (e.g., PTO/SB/17) CD-ROM or CD-R in duplicate, large table or X 1. 7. (Submit an original, and a duplicate for fee processing) Computer Program (Appendix) Applicant claims small entity status. Nucleotide and/or Amino Acid Sequence Submission 2 8. See 37 CFR 1.27. (if applicable, all necessary) Specification [ Total Pages 13 X 3. Computer Readable Form (CRF) (preferred arrangement set forth below) - Descriptive title of the Invention Specification Sequence Listing on: - Cross Reference to Related Applications Statement Regarding Fed sponsored R & D CD-ROM or CD-R (2 copies); or - Reference to sequence listing, a table, or a computer program listing appendix ii. paper Background of the Invention Brief Summary of the Invention Statements verifying identity of above copies - Brief Description of the Drawings (if filed) - Detailed Description ACCOMPANYING APPLICATION PARTS Claim(s) - Abstract of the Disclosure 9. Assignment Papers (cover sheet & documents(s)) 37 CFR 3.73(b) Statement Power of X Drawing(s) (35 U.S.C. 113) [ Total Sheets 10. (when there is an assignee) Attomey Oath or Declaration unsigned [ Total Pages 11 English Translation Document (if applicable) Information Disclosure Copies of IDS X 12. a. Newly Executed (original or copy) Statement (IDS)/PTO-1449 Citations Copy from a prior application (37 CFR 1.63(d)) (for continuation/divisional with Box 18 completed) 13 **Preliminary Amendment** Return Receipt Postcard (MPEP 503) X **DELETION OF INVENTOR(S)** 14. (Should be specifically itemized) Signed statement attached deleting inventor(s) Certified Copy of Priority Document(s) named in the prior application, see 37 CFR 15. (if foreign priority is claimed) 1.63(d)(2) and 1.33(b). Request and Certification under 35 U.S.C. 122 16 (b)(2)(B)(i). Applicant must attach form PTO/SB/35 or its equivalent. Application Data Sheet, See 37 CFR 1.76 17 Other: 18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment, or in an Application Data Sheet under 37 CFR 1.76: Continuation Divisional Continuation-in-part (CIP) of prior application No: Prior application information: Examiner Group / Art Unit. For CONTINUATION OR DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts. 19. CORRESPONDENCE ADDRESS 23494 Customer Number or Bar Code Label Correspondence address below (Insert Customer No. or Attach bar code label here) NAME **Texas Instruments Incorporated ADDRESS** CITY STATE TX ZIP CODE COUNTRY TELEPHONE (301) 259-2089 (301) 259-2603 Name (Print/Type) Robert L. Troik Registration No. (Attorney/Agent) R g. No. 24,183

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office. Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Box Patent Application, Washington, DC 20231.

PTO/SB/17 (1/98)

Approved for use through 09/30/2000. OMB 0651-0032

Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

FEE	<b>TRANSMIT</b>	TAL
	6 - EV 0000	

f r FY 2003

Complete If Known					
Application Number	TBD				
Filing Date	Herewith				
First Named Inventor	Xiaohui Li				
Examiner Name	TBD				
Group / Art Unit	TBD				
Attorney Docket No.	TI-36502				

Ress Mailing Label No.:	ER 052971244US	1	Group / Art Unit TBD					
TOTAL AMOUNT OF PAYMENT (\$) 856.00			Attorney Docket No.				TI-36502	
METHOD OF PAYMENT				FEE CALCULATION (continued)				
1. The Commissioner is her	3.	ADDIT	IONAL	. FEES		•		
Deposit Account,  Deposit Account			E . a'a					
Number 20-0668		Large Fee Code	Entity Fee	Small Fee	Entity Fee	For	Description	For Bold
Second Account			( <b>s</b> ) 130	Code 2051	(S) 65	Surcharge - la		Fee Paid
Deposit Account Name Texas Instruments Incorporated			50	2052	25	_	te provisional filing fee or	-
						cover sheet.		
Charge any additional fee Charge all indicated fees and			130	1053	130	Non-English s	pecification	
required or credit any overpayment	any additional fee required or credit any overpayment							
		1812		1812	2,520	For filing a req	uest for reexamination	
2. Payment Enclosed	l:	1804	920*	1804	920*	Requesting pu Examiner action	ublication of SIR prior to	
	Money Other Order	1805	1,840*	1805	1,840*	Requesting pu Examiner action	iblication of SIR after	
FEE CALC	ULATION	1251	110	2251	<b>5</b> 5	Extension for	reply within first month	
"1: BASIC FILING FEE		1252	400	2252	200	Extension of ti	me within second month	-
Large Entity Small Entity		1253	920	2253	460	Extension of ti	me within third month	
Fee Fee Fee Fee	Fee Description Fee Paid	1254	1,440	2254	720		me within fourth month	
Code (\$) Code (\$)		1255	1,960	2255	980	Extension of ti	me within fifth month	
1001 750 2001 370	Utility filing fee \$770	1401	320	2401	160	Notice of Appe		
1002 330 2002 165	Design filing fee \$	1402	320	2402	160	-	support of an appeal	
1003 510 2003 255	Plant filing fee \$	1403	280	2403	140	Request for or	•	
1004 740 2004 370	Reissue filing fee \$	1451	1,510	1451	1,510		itute a pubic use proceeding	
1005 160 2005 <u>80</u>	Provisional filing fee \$	1452	110	2452	55	Petition to revi	ve - unavoidable	
	SUBTOTAL (1) (8)770	1453 1501	1,280	2453	640	Petition to revi	ve - unintentional	
SUBTOTAL (1) (\$)770			1,280	2501	640	Utility issue fe	•	
2. EXTRA CLAIM FEES		1502	460	2502	230	Design issue f		
2. LATRA CLAIM FEES		1503 1460	620 130	2503 1460	310 130	Plant issue fee	e Commissioner	
•	Fee from	1801	740	2801	370		ontinued Examination (RCE)	
Extra C	laims below Fee Paid	1806	180	1806	180	•	Information Disclosure Stml	
Total Claims 11 -20**= 0	x 18 = 0							
Independent 4 -3** = 1	x 86 = 86	8021	40	8021	40		th patent assignment per number of properties)	
Claims Multiple Dependent	290 =	1809	740	2809	370	Filing a submit	ssion after final rejection (37	
		1810	740	2801	370		ional invention to be	
**or number previously paid, if greater, For I	Reissue, see below						CFR 1.129(b))	
Large Entity Small Entity		,						
Fee Fee Fee Fee	Fee Description							
Code (\$) Code (\$) 1202 18 2202 9	Claims in excess of 20	Oth	er fee (s	nacifu)				
		Otti	ci ice (3	pecity				
1201 86 2201 42	Independent Claims in excess of 3	11						
1203 280 2203 140	Multiple dependent claims in excess of 3  **Reissue independent claims over							
1204 84 2204 42	original patent	Oth	er fee (s	pecify)	•			
1205 18 2205 9	**Reissue claims in excess of 20 and over original patent		•					
SUBTOTAL (2) (\$)86			*Reduced by Basic Filing Fee Paid SUBTOTAL (3)					0
(4)55					-		Complete (if applic	cable)
SUBMITTED BY	Pohort I. Troiks						Reg. Number	0.1.105
Typed or Printed Name	Robert L. Troike				\			24,183
Signature Robert L. Trock				_/2	Date /2/0	3	Deposit Account User ID	